Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/520,495	**Applicant(s)** COSTA ET AL.	
	Examiner NATHAN H. EMPIE	**Art Unit** 1792	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 April 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires *5* months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: *See Continuation Sheet*. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *21,24-27,29-34,36 and 38-40*.
   Claim(s) withdrawn from consideration: *22, 23, 37, and 41*.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/N. H. E./
Examiner, Art Unit 1792

/Katherine A. Bareford/
Primary Examiner, Art Unit 1792

Continuation of 3. NOTE: The amendments made to claim 21 change the scope of the claims which would require further search and consideration..

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments directed to amended matter are moot, as the amendment will not be entered. Applicant's remaining arguments filed 4/29/09 directed to the claim rejections under 35 USC 103 over Kim / Minami / Ravaine have been fully considered but they are not persuasive.
In response to applicant's arguments against the references individually (i.e. "…the Kim article does not disclose of suggest the step of removing alcohol that is formed during the hydrolysis reaction…", "Ravaine does not describe the hydrolyzation of the alkoxide solution in an aprotic solvent, followed by the removal of the solvent"), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The examiner asserts that Minami is relied upon for teaching the removal of alcohol.
In response to applicant's assertion that Minami "does not describe the removal of the ethanol which is produced by the hydrolyzation of the alkoxides" (pg 7 of remarks filed 4/29/09), the examiner asserts that Minami teaches a method of forming a sol-gel derived film by a hydrolysis process involving a metal alkoxide in a solvent (see, for example, [0008]-[0023]), and has explicitly taught "it is preferable to evaporate the solvent and water contained in the solution and the alcohol and water which are products from the dehydration and polycondensation reaction of the above sol-gel material"…"thereby the shrinkage of the formed film is suppressed as much as possible, whereby the occurrence of cracks on the film can be prevented and the cured film can be formed without the occurrence of air bubbles in the film"…(both passages from [0041]). Further in response to applicant's argument that there is no suggestion to combine the Kim and Minami references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art at the time of invention to have incorporated a step of evaporating an alcohol byproduct from the sol, as taught by Minami, into the method of Kim (wherein an alcohol byproduct is produced by the hydrolysis process of Kim) as Minami has explicitly taught such a step would help to reduce shrinkage and cracking in the final sol-gel derived coating.
In regards to applicant's arguments directed to the rejection of claim 40, the examiner would like to emphasize that claim 40 is rejected over Kim in view of Minami and Ravaine (not just Kim and Ravaine, as argued by applicant). Again the argued alcohol removal step has been taught by Minami, as described in the final office action of 12/3/08, and in the preceding paragraphs.
As to the remaining dependent claims, they remain rejected as no separate arguments are provided.